

NEW SPECIES OF CHEYLETIDAE

(ACARINA)

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The Cheyletidae here described were sent to me by E. W. Baker, U. S. Department of Agriculture, Washington, D. C. Three of these species belong to the genus *Paracheyletia* Volgin, which now contains most of those species previously included in the genus *Cheyletia* Haller; one species belongs to the related genus *Eucheyletia* Baker; and the other to the genus *Cheyletus* Schrank.

***Paracheyletia congensis*, new species**

(Fig. 1)

This species is distinguished by the striate, punctate dorsal shields and dorsal setal pattern, and by the shape of the palpal setae.

Female.—Gnathosoma long, prominent; rostrum bottle shaped, lightly punctate; peritreme slight, not obvious; palpal femur punctate, strongly elbowed at middle; dorsal seta of femur broadly lanceolate, serrate; palpal genual seta broad, serrate; other palpal setae typical for genus; palpal claw with seven to eleven basal teeth. Propodosomal and hysterosomal shields distinct, lightly striate, punctate; all dorsal body setae short, broad, serrate, those on posterior of hysterosomal shield and body margin narrow. Dorsal setae of legs I and II mostly broad, or lanceolate, serrate; those on legs III and IV only slightly lanceolate. Sensory rod of duplex setae of leg I long, slender, tactile seta tiny. Body $382\ \mu$ long by $223\ \mu$ wide.

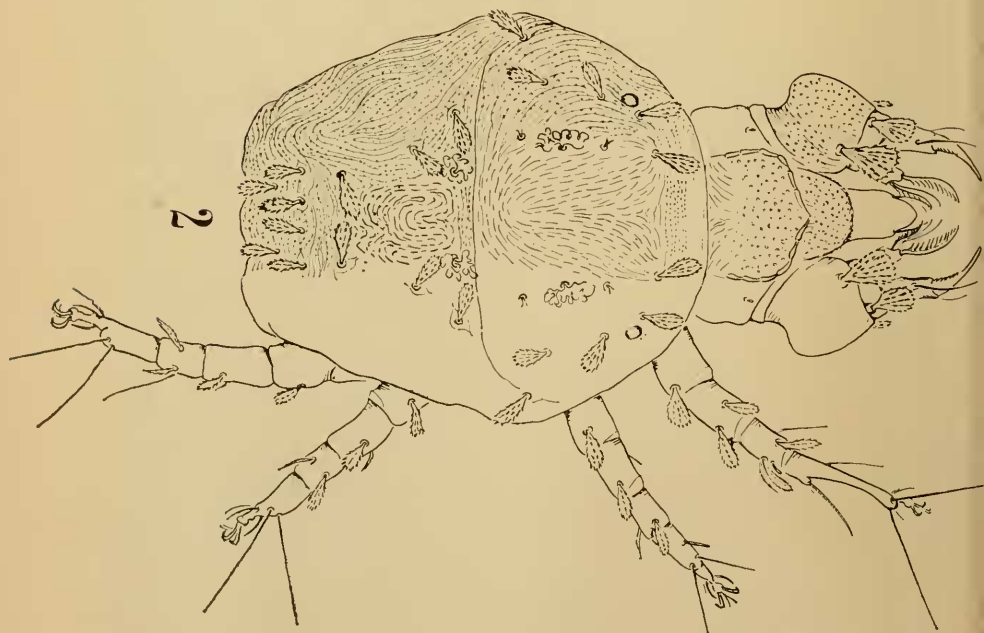
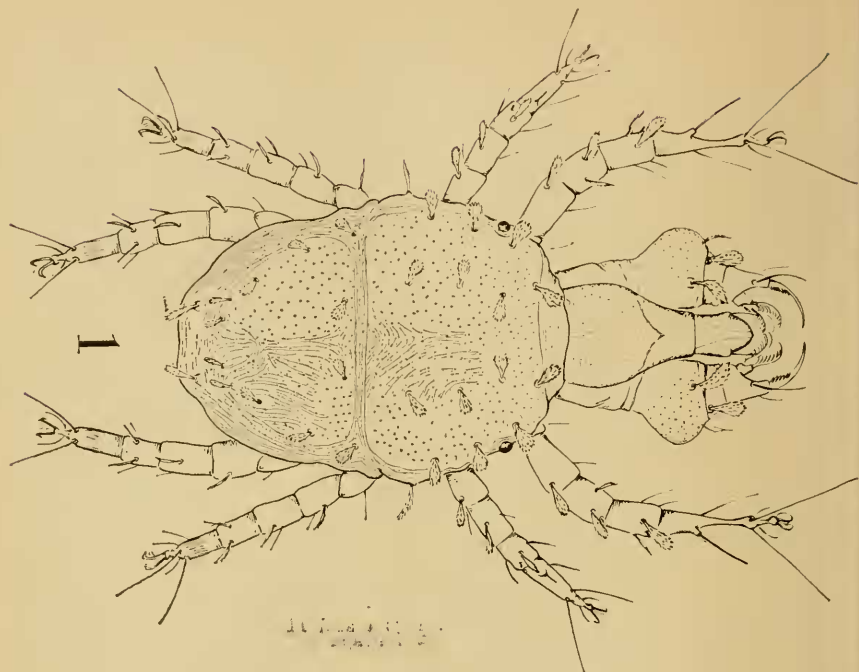
The female holotype, U. S. National Museum No. 2880, and two female paratypes were collected on *Acacia* sp., Kysenyi, Belgian Congo, May 12, 1955. Other specimens were collected on Australian pine, INEAC, Mulunga, May 18, 1955; avocado, Buni, May 2, 1955; ornamental, Leopoldville, April 10, 1955; and *Berlinia* sp., Stanleyville, April 18, 1955. All collections were made by E. W. Baker.

***Paracheyletia volgini*, new species**

(Fig. 2)

This species is characterized by the dorsal setal pattern, the posteriorly elbowed palpal femur, and the large, broad, serrate palpal genual setae.

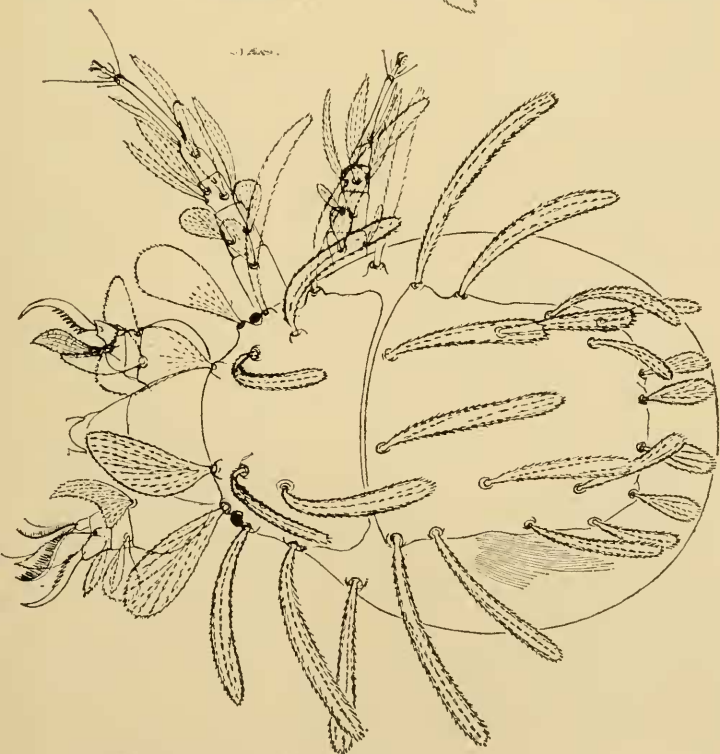
Female.—Gnathosoma broad; rostrum broadly rounded, strongly tuberculate; peritremes prominent; palpal femur broad, about as long as broad, strongly elbowed on outer posterior margin; dorsal femoral seta large, broad, serrate, slightly larger than similar seta on genu; other palpal setae typical for genus; palpal claw with five to six basal teeth. Propodosomal and hysterosomal shields not distinctly delineated, differentiated only by differences in body striae, that of the shields being short, strong, and without tubercles. Most dorsal body setae strong, broad, serrate; three pairs of propodosomal and one pair of hysterosomal setae of the staghorn type. All legs with large, lanceolate, serrate setae, those on leg IV as broad as those of other legs. Body $390\ \mu$ long by $230\ \mu$ wide.



Paracheyletia congensis, new species. Fig. 1, dorsal view of female. *Paracheyletia volgini*, new species. Fig. 2, dorsal view of female.



4



3

Paracheyletia woolfordi, new species. Fig. 3, dorsal view of female. *Eucheyletia reticulata*, new species. Fig. 4, dorsal view of female.

The female holotype, N. S. National Museum No. 2881, two female paratypes, and a nymph were collected on Australian pine, INEAC, Mulunga, Belgian Congo, May 18, 1955, by E. W. Baker.

This species differs from the preceding one in possessing dorso-central staghorn-like setae, and in having broken non-tuberculate striae dorsomedially on both propodosoma and hysterosoma.

***Paracheyletia woolfordi*, new species**

(Fig. 3)

This species is readily recognized by the presence of the long, club-like dorsal body setae, and by the two pairs of broad, fan-like setae on the anterior of the propodosoma.

Female.—Gnathosoma short, broad, without distinctive pattern; peritremes inconspicuous; femur gently rounded, with large, broadly rounded, V shaped serrate seta; genu with broad dorsal serrate seta; tibia with strong, broadly lanceolate, serrate seta; palpal claw with eight tarsal teeth. Hysterosomal shield with anterior two pairs of setae broad, serrate; marginal and median setae serrate, long, strong, club-like. Humeral setae similar to dorsal setae. Hysterosomal shield with nine pairs of setae, the anterior setae long, strong, serrate; the setae gradually shorten and become broader posteriorly as figured. All dorsal leg setae strong, either long, lanceolate, or shorter and fan-like. Length of body $382\ \mu$; width $223\ \mu$.

The female holotype, U. S. National Museum No. 2882, was collected on *Cycas revoluta*, Japan at Hawaii Quarantine, October 16, 1960, by H. A. Woolford. Six female paratypes were collected from *Citrus reticulata*, Japan at Hawaii Quarantine, October 10, 1960, by H. A. Woolford; one female paratype was collected from *Nephrolepis exaltata*, Tahiti at Hawaii Quarantine, January 29, 1961, by H. A. Woolford; and one female paratype was collected from citrus peel, Japan at Hawaii Quarantine, February 10, 1961, by H. A. Woolford.

***Eucheyletia reticulata*, new species**

(Fig. 4)

This species is characterized by the broad squamiform dorsal setae, the leg setae, and the reticulate dorsal shields.

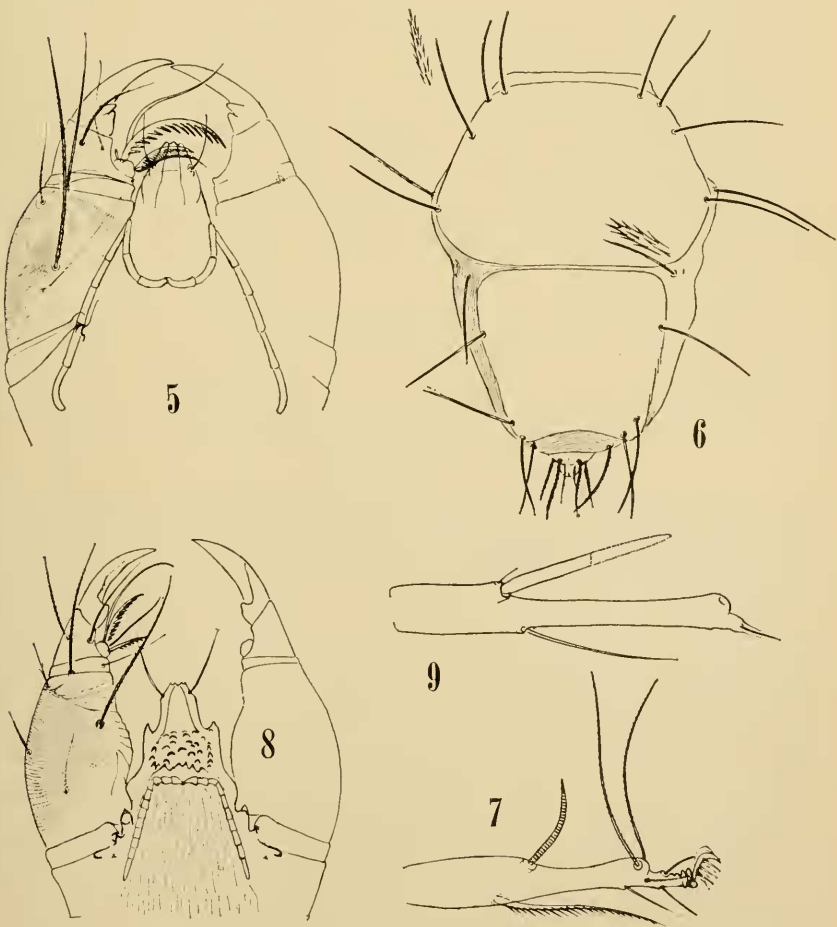
Female.—Gnathosoma broad; rostrum with dorsal reticulate pattern; peritremes slight, not obvious; palpal femur strongly elbowed, with dorsal reticulate pattern, with broadly expanded dorsal seta; dorsal seta of palpal genu broad; other palpal setae typical for genus. Palpal claw with three to four basal teeth. Propodosomal and hysterosomal shields with reticulate pattern; all dorsal body setae broadly squamiform, serrate. Propodosomal shield with four pairs of marginal setae and only one pair of dorsomedian setae; hysterosomal shield with eight pairs of broadly squamiform setae, the anterior marginal pair nearly off the shield. Dorsal setae of legs broad to narrowly lanceolate, as figured. Sensory rod of duplex setae of tarsus I long, slender, not reaching tip of tarsus; tactile seta almost twice as long as sensory setae, and nearly reaching tip of tarsus. Body $395\ \mu$ long by $223\ \mu$ wide.

The female holotype, U. S. National Museum No. 2883, was collected from *Oryza sativa*, Tahiti at Hawaii Quarantine, February 5, 1961, by H. A. Woolford.

***Cheyletus malayensis*, new species**

(Figs. 5-9)

This species is allied to *Cheyletus malaccensis* Oudemans in the general body facies and palpal claws, but is easily separated by the long dorsal body setae, and the strong tarsal sensory setae on tarsi I of both sexes.



Cheyletus malayensis, new species. Fig. 5, dorsal view of gnathosoma of female; fig. 6, dorsal view of female; fig. 7, tarsus I of female; fig. 8, dorsal view of gnathosoma of male; fig. 9, tarsus I of male.

Female.—Gnathosoma strong, longer than wide; rostrum with faint broken longitudinal striations; with prominent peritremes, each unit consisting of eight segments; palpal femur with long, slender pubescent dorsal seta and two short ventral setae; genu short, broader than long, with pubescent whip-like seta; other palpal setae typical for genus; palpal claw with two basal teeth similar to those of *Cheyletus malaccensis* Oudemans, the distal tooth finger-like, the proximal tooth long, flat. Dorsal shields covering much of body, without sculpturing. Propodosomal shield with four long, serrate setae; humeral setae longer than shield setae; hysterosoma with three pairs of setae similar to those on propodosomal shield. Leg setae typical; tarsus I with long, strong sensory seta. Length of body 600 μ ; width 300 μ .

Male.—Body setation similar to that of female. Palpus elongate, sculptured as figured. Tarsus I with large sensory seta (only a single male is available and this has the sensory seta broken as figured). Length of body 478 μ ; width 210 μ .

Type female, Bishop Museum, Honolulu, Hawaii, taken from nest of *Munia atricapilla*, Selangor Rantan Panjang, Malaya (5 miles north of Klang), 1960, by H. E. McClure. A female paratype, in the U. S. National Museum, taken from nest of *Munia striata* in the above locality, October 5, 1960, by H. E. McClure. A male paratype was taken from the nest of *Pycnonotus goiaver*, from the above locality, 1960, by H. E. McClure, and is in the Bishop Museum.

ALLYGIDIUS ATOMARIUS (FAB.), A NEW UNREPORTED SPECIES FOR NORTH AMERICA

(HOMOPTERA: CICADELLIDAE)

In a survey of the insects associated with grass and leguminous forage crops in New York in the summer of 1961, a common European leafhopper, *Allygidius atomarius* (Fab.), was collected for the first time in North America. This insect has been reported to injure chrysanthemums in Germany (Bodenheimer, 1921, Zeitschr. Pflanzenkr. 31(3-4): 97-100) and has been found to survive on bushes, shrubs and trees, such as oak, elm and alder, in Europe, North Africa and Caucasia (Fagel, 1949, Bul. Ann. Soc. Ent. Belg. 85: 144-153; Ribault, 1952, Faune de France 57: 207-211).

One specimen of *A. atomarius* was collected in early July in each of three western New York counties (Livingston, Monroe and Ontario) in fields composed predominantly of alfalfa and red clover. The extent of injury, if any, to forage grasses and legumes by this insect remains to be determined.

The authors are indebted to Dr. J. P. Kramer, U. S. Department of Agriculture, for identification of the specimens.

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